



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL WEATHER SERVICE
Silver Spring, Md. 20910

MEMORANDUM FOR: All NWS Regional Headquarters, Regional Maintenance Specialists, Electronic Systems Analysts, and Electronics Technicians [Engineering Handbook (EHB)-13, Series II distribution]

FROM: W/OPS1 - Mark S. Paese

SUBJECT: Transmittal Memorandum for EHB-13 Series II, Issuance 02-25

1. Material Transmitted:

Engineering Handbook No. 13 Series II, Advanced Weather Interactive Processing System (AWIPS), section 3.1, AWIPS Software Installation Instruction Note 34, Maintenance Release 5.2.2.1

2. Summary:

AWIPS Software Installation Instruction Note 34, provides instructions to download and install maintenance release 5.2.2.1

3. Effect on Other Instructions:

File this note in EHB-13, Series II, section 3.1. Discard all previous software installation instructions in section 3.1.



AWIPS SOFTWARE INSTALLATION INSTRUCTION NOTE 34
(for Electronic Systems Analysts)
Maintenance, Logistics, & Acquisition Division
W/OPS1: FJZ

SUBJECT : Maintenance Release 5.2.2.1

PURPOSE : To provide installation instructions for Maintenance Release 5.2.2.1.

PATCH NUMBER : MR5221_SEC_A100270

AUTHORIZATION : The authority for this modification note is Request for Change 270

AFFECTED SITES : All AWIPS sites must install this maintenance release.

VERIFICATION STATEMENT : The Release 5.2.2.1 installation procedures were tested and verified at Central Region Headquarters (BCQ), WFO Kansas City, MO (EAX), Southern Region Headquarters (EHU), Alaskan Region Headquarters (VRH), WFO Pittsburgh, PA (PBZ), WFO Wilmington, OH (ILN), and WFO Philadelphia, PA (PHI).

PREINSTALLATION REQUIREMENTS: R5.2.2 must be installed.

TIME REQUIRED : Approximately 10 -15 minutes for the maintenance release, 15 minutes for the localization script, and about 30 minutes for the push script

SECURITY LEVEL : root

TECHNICAL SUPPORT : For questions or problems regarding these installation instructions or installing this Release, please contact the NCF at 301-713-9344.

A. PATCH SUMMARY :

1. VAD wind profiler plots are no longer usable (DR #11531 - P522_FSL_A100258).
2. Radar audio alarm does not alarm when dedicated radar is down (DR #11560 - P522_FSL_A100257).
3. Warnngen products are not tone alerting (DR #11516 - P522_MDL_A100256).
4. User cannot log into the Linux CPs via the console port (DR #11487).
5. The "build_dns" script does not update the "namesvrs" file correctly (DR #11558).
6. Auto-update for Cross Section products (RCS) does not work (DR #11368 - FSL_A100254).
7. LSR legend text missing (DR #11631 - MDL_A100266).
8. RiverPro PE Variable optional lid feature is no longer functional (DR #11636 - OHD_A100268).
9. FFG displayed in Hmap/Mpe appears incorrect (DR #11573 - OHD_A100269).
10. Some IFPS executables have incorrect ownership and/or permissions (DR #11527 - MDL_A100267).
11. textDB fails to write some products to the database (DR #11654 - SEC_A100282).
12. Product headers created by different source program are inconsistent (DR #11649 - SEC_A100281).

B. R5.2.2.1 Detailed Description:

1. VAD wind profiler plots are no longer usable (DR #11531 - P522_FSL_A100258).

The VAD wind product is pushed to the top of the screen, displaying approximately one-quarter of the product. The rest of the screen remains blank.

2. Radar audio alarm does not alarm when dedicated radar is down (DR #11560 - P522_FSL_A100257).

Sites no longer receive the Red Banner alarm messages when the RDA is down. The problem affects sites that have activated the ORPG to AWIPS TCP/IP connection. Variations of the problem, such as placing the RDA in standby mode or if the LAN comm link to the OPRG is down, also fail to generate a Red Banner. In most cases, the radar is functional.

3. Warnngen products are not initiating a tone alert (DR #11516 - P522_MDL_A100256).

Products created from warnngen permanently set the tone alert button in the NWR products to "N"; disabling the tone-alert for those products. This occurs even if the individual products are set to tone alert.

4. User cannot log into the Linux CPs via the console port (DR #11487).

The /etc/inittab file for the Linux CPs running RedHat 7.0 has an incorrect getty entry for the console port.

5. The “build_dns” script does not update the “namesvrs” file correctly (DR #11558).

The script attempts to “remsh” to each server to update the /etc/rc.config.d/namesvrs file on each host. Due to a code error, only the local server is updated. This error was introduced as part of BNCF activation.

6. Auto-update for Cross Section products (RCS) does not work (DR #11368 - FSL_A100254).

- Sites report that auto-updating for Cross Section products (RCS) does not work. PBZ was able to recreate the problem. Found the order of the subkey entries in the “radarDepictKeys.template” file was incorrect.
- Added additional field to specify inventories should be union merged.

7. LSR legend is missing text (DR #11631 - MDL_A100266).

After the LSR header and before the LSR events, the old LSR format contained some text used as a partial legend to describe the format of the events. The LSR GUI does not produce this text, but this text is needed by SPC's decoder (for the time zone).

8. RiverPro PE Variable optional lid feature no longer works (DR #11636 - OHD_A100268).

RiverPro uses templates to control the specific content of the generated product. The templates have variables that are filled at runtime, and include a class of variables called PE (physical element) variables. These variables are used extensively. The PE variables have a feature where the user specifies the variable they want, then gives a (often long) list of locations which will use those variables. This allows the location to be omitted from the variable definition, thereby greatly simplifying the template definition. Changes made to improve error checking, now rejects valid PE variable requests. These templates will no longer work and would require extensive modifications to the template definition by each site.

9. FFG displayed in Hmap/Mpe appears incorrect (DR #11573 - OHD_A100269).

The FFG displayed in Hmap/Mpe does not match the D2D display. About half of the area for FFG is displayed as missing. There is a border area between the missing section and the section with data that has unreasonable values displayed at individual grid points.

10. Some IFPS executables have incorrect ownership and permissions (DR #11527 - MDL_A100267).

Permissions and ownerships need to be modified in order for the LX platforms to failover the Applications and Service Backup capability within IFPS.

11. "textDB" fails to write some products to the database (DR #11654 - SEC_A100282).

The 'textdb -w' command fails to store local products due to the products being identified as duplicates. The method used for determining the duplicate products was modified for this release. When the incoming product In 5.2.1 did not have a valid WMO header (such as "ZCZC PITABVPIT"), but its header length was within the valid WMO header length ($12 < \text{WMO header length} < 26$), textDB software would accept it and not flag it as a duplicate. Therefore the product would be stored no matter what. In 5.2.2, if the incoming product does not have valid WMO header (TTAAii CCCC YYGGgg BBB), the product is flagged as invalid and will not be stored into the database. The correction is to detect an invalid WMO header, but store the product regardless of WMO header.

12. Product headers created by different source program are inconsistent (DR #11649 - SEC_A100281)..

A change to distributeProduct has broken some external customer's software at the Aviation Weather Center (AWC). The non-AWIPS software requires padded spaces on the second line of the WMO header. The second line of the product header will be padded with white space(s) if the product designator XXX is less than three characters long. The distributeProduct software will be reverting back to the pre-R5.2.1.3 functionality. The product header created by handleOUP.pl will now be the same as the product header created by distributeProduct. This will allow true duplicate product checking regardless of the source program.

C. Pre-Installation

1. R5.2.2 must be installed.
2. Check http://www.ops1.nws.noaa.gov/awips_software.htm web page for a lessons learned document for this release.
3. Logout of all the D2D sessions on BOTH HP workstations and Linux platforms.
4. Logout of all the Text Workstations.

D. Maintenance Release Download and DS1 Installation Procedure

NOTE: NGIT has pushed all the files to the /data/local/R5.2.2.1 directory at each AWIPS site.

1. At an HP workstation, open a telnet window and log into ds1 as **root** by typing:

```
rlogin ds1-<site> -l root
```

2. Change to the /data/local/R5.2.2.1 directory by typing:

```
cd /data/local/R5.2.2.1
```

3. Create a script output log file by typing:

```
script -a R5.2.2.1.out
```

4. Uncompress the release bundle by typing:

```
zcat R5.2.2.1.tar.Z | tar xvf -
```

5. Run installation script by typing:

```
./installR5.2.2.1
```

6. Stop the output script by typing:

```
./stopscript
```

Note: Login D2Ds and the workstations after the completion of install scripts.

This completes the maintenance release download and installation procedure.

E. Post Installation Configuration Checkout

1. Check the `.out` file for any files that may not have been removed or copied correctly. Check for `cannot write: Text file busy`.

```
grep busy R5.2.2.1.out
```

If any files were not removed correctly, delete them manually.

Note: 1. To correct the auto-updating of Cross Section products (RCS), the following steps need to be performed after the installation:

Warning: If the site is installing the R5.2.2 and the maintenance release 5.2.2.1 on the same day, **DO NOT** perform following localization and push functions immediately. Localization and Push steps must be completed two (2) days after the R5.2.2 installation.

- a. On DS1, execute the following "forced" localization.

```
su - fxa
cd /awips/fxa/data/localization/scripts
./mainScript.csh f -radar
exit
```

- b. Upon successful completion of the localization, execute the following "push" script.

```
su - root
cd /data/local/R5.2.2.1
./push_localization_R5.2.2.1
exit
```

REPORTING MODIFICATION

Report the completed software installation using the Engineering Management Reporting System (EMRS) according to the instructions in the NWS Instruction 30-2104, Maintenance Documentation, Part 4, and Appendix F. A sample EMRS report is attached. As an additional guide, use the information in the table below.

Block #	Block Type	Information
5	Description	Install AWIPS Maintenance Release 5.2.2.1 (patch # MR5221_SEC_A100270) I.A.W. AWIPS Software Installation Instruction Note 34
7	Equipment Code	AWIPS
8	Serial Number	001
15	Comments	Installed Maintenance Release 5.2.2.1 (patch # MR5221_SEC_A100270) I.A.W. AWIPS Software Installation Instruction Note 34
17a	Mod. No.	S34

Mark S. Pease
Acting Chief, Maintenance, Logistics, and Acquisition Division

Attachment - EMRS Report Sample

Attachment - Sample EMRS Report

A26 Detail Form - ESCM2, SILVER SPRING, MD :: EMRS ANALYST - Microsoft Internet Explorer

New A26 Commit A26 Place on Hold Copy A26 Delete A26 Detail Report Preference Document Summary Help

GENERAL INFORMATION

NEW RECORD WFO* CTP Document No.* CTP21021000

1. Open Date Open Time 2. Op Initials 3. Response Priority 4. Close Date Close Time

W3H ☐ Immediate ☐ Low ☒ Routine ☐ Not Applicable

5. Op Description AWIPS

Install AWIPS Maintenance Release 5.2.2.1 (patch # MR5221_SEC_A1002T0)

EQUIPMENT INFORMATION

6. Station ID* 7. Equipment Code 8. Serial Number 9. TM 10. AT 11. How Mal

CTP AWIPS 001 M M 999

Alert: Time Remaining: (For Block 12 use only)

14. WORKLOAD INFORMATION

a. Routine	b. Non-Routine	c. Travel	d. Misc	e. Overtime
Hours Minutes	Hours Minutes	Hours Minutes	Hours Minutes	Hours Minutes
			1 0	

13. PARTS USAGE and CONFIGURATION MANAGEMENT REPORTING

ASN	Vendor Part No. (New Part)	Serial Number (Old Part)	Serial Number (New Part)	
				New Row...
				Delete Row

17. SPECIAL PURPOSE REPORTING INFORMATION

a. Mod No. b. Mod Act/Deact Date c. Block C d. Trouble Ticket No. e. Block E

B34

MISCELLANEOUS INFORMATION

15. Maintenance Comments

Installed AWIPS Maintenance Release 5.2.2.1 I.A.W. AWIPS Software Installation Instruction Note 34.

16. Tech Initials

DIS

Commit A26 Place on Hold Copy A26 New A26 Cancel

Done Internet